REMARKS/ARGUMENTS

Claims 1-33 remain in the application. Of these, claims 1-22 stand rejected, and claims 23-33 are newly presented.

Support for newly presented claims 23-26 is found, at least, on page 10, lines 18-30. Support for newly presented claims 27-29 is found, at least, on page 14, lines 7-21. Support for newly presented claim 30 is found, at least, on page 14, line 22 – page 15, line 10. Support for newly presented claims 31 and 32 is found, at least, on page 17, line 28 – page 18, line 5. Support for newly presented claim 33 is found, at least, on page 17, line 28 – page 18, line 5, and in original claim 1.

1. Rejection of Claims 1-8, 10-18 and 20-22 Under 35 USC 102(b)

Claims 1-8, 10-18 and 20-22 stand rejected under 35 USC 102(b) as being anticipated by Kanai et al. (U.S. Pat. No. 5,864,679 of Kanai et al.; hereinafter "Kanai").

With respect to Applicant's claim 1, the Examiner asserts that "routing a transaction to a front-end server" is generally taught by Kanai in FIG. 3; col. 10, lines 40-67; FIG. 4; col. 13, lines 61-67; FIG. 5; and col. 14, lines 40-52. The Examiner also asserts that "identifying at least one of a plurality of front-end servers to process said transaction based at least in part on said identified attribute-based category of said transaction and at least in part on said front-end servers being assigned to execute transactions corresponding to said attribute-based category" is taught by Kanai in col. 15, lines 56-62. Applicant disagrees.

In col. 15, line 17 – col. 16, line 11, Kanai teaches the use of a data arrangement table 4B and routing table 4C by a transaction routing unit 4 (see also FIGS. 7-9). Applicant notes, however, that neither of the tables (i.e., table 4B or 4C) maintains assignments between front-end servers and attribute-based categories of transactions. Rather, Kanai uses a transaction type to index table 4C (FIG. 9) and determine which of a number of transaction arguments should be used to specifically identify the data required by the transaction. Kanai then uses these transaction

arguments to index table 4D (FIG. 8) and determine which of a number of transaction processors is specifically assigned to access the data required by the transaction.

In contrast to what Kanai discloses, the invention of Applicant's claim 1 routes a transaction based on whether an attribute-based category that is associated with the transaction has been assigned to a particular front-end server. Thus, instead of determining whether the data required by a transaction "is" at a certain processor (as Kanai teaches), the invention of Applicant's claim 1 projects where data required by a transaction "may be" based on a server's association with a particular attribute-based "category". Although the invention of Applicant's claim 1 may at times be less accurate than Kanai's method (which, according to Kanai, is a "deterministic algorithm"; see col. 15, lines 65-67), Applicant's method can often provide close to the same accuracy, but with faster routing and less overhead.

In some ways, the invention of Applicant's claim 1 is more akin to Kanai's "probabilistic algorithm" (see col. 11, line 64 – col. 12, line 20). However, in contrast to Kanai's maintenance of the processing history and processing cost for each of a number of routed transactions, the invention of Applicant's claim 1 routes transactions based on assignments of attribute-based transaction "categories" to particular front-end servers.

With respect to Applicant's claim 7, the Examiner asserts that Kanai teaches "determining when said identified attribute-based category is new and assigning said new attribute-based category to at least one of said plurality of front-end servers" in col. 15, lines 1-25. Applicant disagrees. What Kanai teaches is how to route a "newly arrived transaction", and not how to assign a new attribute-based category to a front-end server.

With respect to Applicant's claim 8, the Examiner asserts that Kanai teaches "notifying a workload manager of said at least one front-end server assigned to said new attribute-based category" in col. 15, lines 17-32. Applicant disagrees. What Kanai teaches is that upon a determination of a "new data arrangement" amongst the transaction processors, this arrangement may be provided to the transaction routing unit. This is not the same as notifying a workload manager of a new *attribute-based category being assigned to a front-end server.*

With respect to Applicant's claim 13, the Examiner asserts that, in col. 15, lines 26-62, and in FIGS. 9 & 10, Kanai teaches an attribute-based category being based on at least one "perceived" attribute of a transaction. Applicant disagrees. Kanai says nothing about real versus perceived attributes of a transaction. Although Kanai's method can rely on transaction arguments such as a "Teller-ID" or a "Branch-ID", these arguments are used to determine which of a number of transaction processors is assigned to the data required by a transaction. These arguments (Teller-ID and Branch-ID) are not assigned to a particular server to which all transactions having the same attribute-based category are routed.

With respect to Applicant's claim 14, the Examiner asserts that Kanai teaches "a user table for assigning said at least one attribute-based category to said transaction" in col. 15, lines 45-62. Applicant disagrees. What Kanai discusses in this paragraph is how to look up transaction arguments in a routing table. The user table recited in Applicant's claim 14 is for assigning the attribute-based category, which has to be done before the assigned attribute-based category can be used to look something up. Providing a user table for assigning an attribute-based category to a transaction implies that the transaction does not automatically carry this information, which Applicant believes to be novel when combined with the code for routing a transaction described in his claim 10.

Each of Applicant's claims 1-8, 10-18 and 20-22 is believed to be allowable at least for the above reasons, or because it depends from one of the above-mentioned claims, or for reasons similar to the above reasons.

2. Rejection of Claims 9 and 19 Under 35 USC 103(a)

Claims 9 and 19 stand rejected under 35 USC 103(a) as being unpatentable over Kanai et al. (U.S. Pat. No. 5,864,679 of Kanai et al.; hereinafter "Kanai") in view of Cross et al. (U.S. Pat. No. 6,681,244; hereinafter "Cross").

The Examiner asserts that Cross teaches "determining a status of an attribute-based category; and deallocating said attribute-based category from said front-end server to which it is assigned when said status is inactive" in col. 6, lines 15-27.

Applicant disagrees. What Cross teaches is a switch's removal of a client machine's address from its network table if the switch does not detect a data packet from the client within a predetermined time interval. Cross' switch is not a front-end server. Nor does Cross teach or suggest how its switch is related to the transaction routing method taught by Kanai. Claims 9 and 19 are therefore believed to be allowable in that a combination of Kanai's and Cross' teachings does not yield the inventions of these claims. These claims are also believed to be allowable for the reason that they depend from other claims which are believed to be allowable.

3. New Claims

New claims 23-26 are believed to be allowable because Kanai does not discuss "perceived" transaction attributes, nor the specific kinds of perceived transaction attributes recited in these claims.

New claims 27-33 are believed to be allowable because, as mentioned in section 1 of these Remarks, Kanai does not teach the assignment of a transaction's attribute-based category to a server. As a result, Kanai cannot teach the specific manners in which this may be done, as recited in claims 27-33.

Claims 23-32 are also believed to be allowable in that these claims depend from other claims which are believed to be allowable.

4. Conclusion

Given the above Remarks, Applicant respectfully requests the timely issuance of a Notice of Allowance.

Respectfully submitted,
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